RECORDS AND DESCRIPTIONS OF SOME SOUTHWESTERN CERAMBYCIDAE (COLEOPTERA)

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ABSTRACT

Elaphidionoides occidentalis and *Aneflomorpha rectilinea yumae* are described as new. The Neotropical *Mannophorus forreri* Bates and *Sphaerion exutum* (Newman) are recorded from the southwestern United States for the first time.

Two previously undescribed members of the tribe Elaphidionini have been found during several years of collecting in the vicinity of Yuma, Arizona. Both infest *Salix* sp., and both are closely related to species which occur from south-central Arizona into Mexico. The southern Colorado River basin is a rather restricted habitat, surrounded as it is by Sonoran desert. As in the endemic *Aneflus protensus pallidus* Tyson, *Dendrobias mandibularis reductus* Casey, and *Stenosphenus nigricornis* Fisher, the 2 species described below tend to have a lighter colored integument; related forms to the east and south are darker. The genus *Elaphidionoides* Linsley has been known previously in the Southwest only by *E. gibbulus* (Bates).

Elaphidionoides occidentalis Giesbert and Hovore, **new species** (Fig. 1)

Description: MALE.—Form moderately robust; integument reddish brown, clothed with irregular patchy appressed yellowish pubescence. Head coarsely punctate between eyes, less coarsely behind, punctures somewhat obscured by pubescence; antennae surpassing elytral apices by at most 2 segments, segments 3 to 7 armed with internal spine at apex, segments 1 to 6 or 7 moderately densely clothed with recumbent pubescence and fringed internally with suberect longer hairs, distal segments clothed with very short suberect pubescence, segment 3 longer than 4, segments 3, 5, 6, and 7 subequal, segments 8 to 10 successively shorter, segment 11 longer than 10. Pronotum rounded at sides; disk coarsely shallowly confluently punctate, punctures shallower and slightly larger than those at base of elytra, with elevated median longitudinal polished area, and with 10 or more dorsal and lateral patches of appressed yellowish pubescence; prosternum rugose, transversely impressed in front of coxae; metasternum shallowly punctate, clothed with suberect pale hairs. Elytra wider at base than pronotum, at most 2½ times as long as basal width; surface somewhat coarsely and deeply punctate at base, punctures partially obscured by pubescence, becoming gradually smaller and more shallow apically; pubescence consisting of single suberect hairs borne by punctures, and small patches of appressed yellowish hairs fairly thickly scattered in a feebly longitudinally irrorate pattern; apices shallowly emarginate or truncate, inner angle usu-

ally spinose, outer angle at most dentate. Legs moderately slender, femora shallowly punctate and pubescent. Abdomen with shallow punctures bearing fine hairs; sternites 4 and 5 nearly equal in length, 5 broadly rounded at apex. Length 15-22 mm.

FEMALE.—Form more robust than male. Antennae short, at most attaining elytral apices. Pronotum coarsely contiguously punctate, punctures larger than those at base of elytra. Abdomen with sternite 5 longer than 4, rather narrowly rounded at apex. Length 18-20 mm.

TYPES.—Holotype male, allotype, (California Academy of Sciences) and 1 female paratype from CALIFORNIA, Imperial County, Laguna Lake, under bark of *Salix* log, 8-VII-69 (E. Giesbert and E. Weidert). 14 additional paratypes as follows: CALIFORNIA: 1 male, Imperial County, Laguna Lake,

Fig. 1. *Elaphidionoides occidentalis* Giesbert and Hovore male, line represents 5 mm.

reared from *Salix,* emerged 3-VII-70 (E. Giesbert); 3 males, 1 female, Imperial County, Laguna Dam, at ultraviolet light, 4-VIII-73, 1 male, same locality, 3-VII-72 (A. E. and D. S. Lewis); 1 male, Imperial County, 2 mi. N. Laguna Dam, Colorado River, 21-VII-74 (J. S. Cope); 1 male, Imperial County, Brawley, at white light, 1-VII-66 (D. G. Marqua). ARIZONA: 1 male, 1 female, Yuma County, Morelos Dam, reared from *Salix,* emerged 26, 27-VII-73 (F. T. Hovore).[1] One additional female, not named a paratype, in collection of AMNH, labelled simply "Yuma, Cal".

Diagnosis: This species is related to *E. gibbulus* (Bates), to which it will key in Linsley's 1963 treatment of the genus, and with which it agrees in having the elytral spines short, the body robust, and in the form of the pronotum. It may be easily distinguished from that species, however, by the generally lighter color, denser pubescence, shorter, more pubescent antennae, deeper basal elytral punctures, and shorter, more robust form.

Natural history: *E. occidentalis* has been found working beneath the bark of recently dead major limbs of *Salix.* The larvae construct meandering galleries packed with granular frass composed of both bark and wood. Mature larvae either enter the heartwood to construct a pupal chamber, or make a shallow chamber beneath the bark. Pupation generally occurs in June, with adults active in July and August. Infested limbs and small branches examined by the authors were 3 to 7 inches in diameter. Craighead (1923) describes the larva of *E. gibbulus* and records it as " . . . working much as *E. mucronatus,* beneath the bark of dead *Salix, Populus,* and less frequently *Quercus.* It is usually found in somewhat decayed wood, associated with a species of *Acanthoderes.*" We have observed the same associations in the field in south-central Arizona. *E. occidentalis,* however, has thus far been found only in sound, recently dead wood.

Aneflomorpha rectilinea yumae Giesbert and Hovore, **new subspecies**

Description: MALE.—Form elongate, small to moderate sized; integument testaceus; pubescence moderately dense, yellowish, subrecumbent and suberect. Head closely, coarsely punctate, pubescence moderately dense, especially dense within emarginations of eyes; interantennal depression distinct, antennal tubercles fairly prominent; palpi unequal, last segment slightly expanded; antennae surpassing elytral apices by at least 1 segment, segments 3 to 6 spinose at apices, 7 sometimes with a small tooth, segments 3 to 8 distinctly carinate dorsally, 9 vaguely so, basal segments clothed with subrecumbent hairs, distal segments rather densely clothed with very short appressed and erect pubescence, long suberect hairs numerous basally, segments 3 and 5 to 10 subequal, all longer than 4, 11 slightly longer, appendiculate. Pronotum longer than wide, sides broadly rounded, slightly constricted at base and apex; disk coarsely, densely, confluently punctate, rugose appearing, sometimes with vague median callus; pubescence moderately dense, subrecumbent, partially obscuring surface, longer, erect hairs present laterally; prosternum very shallowly impressed, anterior portion transversely rugose, posterior coarsely, rugosely punctate, densely pubescent. Scutellum very densely pubescent. Elytra over 3½ times longer than wide; base coarsely separately punctured, punctures becoming finer and shallower apically; pubescence moderately dense, subrecumbent, not obscuring punctation, with scattered longer suberect hairs, especially at margins of disk; apices emarginate, bidentate. Legs

slender; femora coarsely densely punctate, rather sparsely pubescent; tibiae carinate. Abdomen moderately densely shallowly punctate, densely pubescent; apex of sternite 5 shallowly emarginate or truncate. Length 10-18mm.

FEMALE.—Antennae shorter than body; apex of abdominal sternite 5 subtruncate. Length 10-18 mm.

TYPES.—Holotype male, allotype (California Academy of Sciences), and 4 paratypes (3 males, 1 female) from ARIZONA: Yuma County, Morelos Dam, beaten from *Salix,* 10-VI-72 (E. Giesbert). Additional paratypes from same locality as follows: 4 males, 1 female, reared from girdled *Salix* branches, emergences 10-V, 16-V, and 6-VI-73 (F. T. Hovore); 4 males, 2 females, 22-VI-71, (E. Giesbert).

Diagnosis: The testaceus integument, and yellowish pubescence, which is especially dense on the scutellum and in the emarginations of the eyes, will separate *A. rectilinea yumae* from the nominate subspecies. In Linsley's 1963 key to the genus *Aneflomorpha, A. r. yumae* will run to *A. citrana* Chemsak, but differs from that species by the longer elytra, somewhat lighter color, and slightly thicker pubescence. In addition, in the material examined by us, both subspecies of *A. rectilinea* have the base of the pronotum more than 2/3 as wide as the elytra at the humeri. In *A. citrana* the base of the pronotum is less than 2/3 the humeral width of the elytra. Linsley, in his 1963 discussion of *A. rectilinea,* states the need for more biological information in order to recognize segregates. We feel that this form should be segregated on the basis of host information gained by rearing, and by the characters enumerated above.

Natural history: Unlike *A. r. rectilinea,* which is recorded as having been collected on *Quercus* and *Baccharis* (Linsley, 1963), host associations for *A. r. yumae* are with *Salix.* The larvae girdle small branches ½ to 1½ inches in diameter, which often remain hanging loosely in the tree. The girdled portion is worked toward the distal end, and galleries are filled with loose granular frass. Pupal chambers are plugged with stringy frass. The girdled branches serve as host for several other beetles, including another cerambycid *(Stenosphenus nigricornis* Fisher), and a buprestid (*Hesperorhipis* sp.).

Mannophorus forreri Bates

Mannophorus forreri Bates, 1885, Biologia Centrali-Americana, Coleoptera 5:327, 436, pl. 21, fig. 24.

This species, previously known from the state of Durango, Mexico, and illustrated in the Biologia Centrali-Americana (Bates, 1885), was taken on Kitt Peak, Cochise County, Arizona, by David G. Marqua in September 1971. It has since been collected in large numbers in the same area on flowers of various Compositae.

Sphaerion exutum (Newman)

Nephalius exutus Newman, 1841, Entomologist, 1:93.
Sphaerion exutum Gounelle, 1907, Bull. Soc. Ent. France, 1907:240; Linsley, 1961, Pan-Pacific Ent. 37:169-170.

This species, previously known from Brazil and Argentina (Blackwelder 1946), and from Chiapas, Mexico (Linsley 1961), is also a new record

for U. S. Cerambycidae. It was collected by us in May 1972 on trunks of living ebony blackbead trees, *Pithecellobium flexicaule* (Benth.) in Bentsen Rio Grande Valley State Park, Hidalgo County, Texas. Six specimens were taken at that time, 2 more the following year by A. E. Lewis. The identification was verified by E. G. Linsley.

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[1]Also 4 males, same locality, reared from *Salix* logs, emerged 12-IX-75 and 5, 10-I-76 (E. Giesbert and F. Hovore).

INSTANT RELAXING OF INSECTS

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A recurring problem for coleopterists, and particularly for students of Staphylinidae, is that in dried mounted specimens important structures are often obscured by appendages or by curling or twisting of the specimen at death. In many staphylinids it is necessary to lift the front coxae to determine the structure of the intercoxal parts. In some linear species poorly mounted specimens may have much of the under surface hidden because of